

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1. (original) A method for measuring distance between a stator (5) and an opposing rotor (3) in a machine, in particular a refiner designed for the manufacture of paper pulp, where the stator is provided with at least one sensor device (7) of the magnetic type which is intended to interact with an opposing surface on the rotor, and where a sensor body (10) can be moved axially in a housing (11) mounted in the stator, with the sensor device being calibrated by the sensor body being moved a distance in the direction towards the rotor and the size of this movement being related to the signal value from the sensor device, characterized in that the movement is made so large that contact is made between stops (16, 17) in the sensor device arranged at a predetermined distance (c) apart and interacting with each other, with one stop (16) being arranged on the sensor body (10) at a predetermined distance (e) from the end surface of the measuring end (10a) of the sensor body (10), which distance (e) is considerably smaller than the length of the sensor body (10), and the second stop (17) being arranged in the housing (11).
2. (original) A method according to Claim 1, characterized in that the movement is commenced from a position where the end of the sensor body (10) is on a level with a grinding segment (9) facing towards the rotor (3).

3. (original) A sensor device for measuring distance between a stator (5) and an opposing rotor (3) in a machine, in particular a refiner designed for the manufacture of paper pulp, where the sensor device (7) is of the magnetic type and is intended to be mounted in the stator in order to interact with an opposing surface on the rotor, and where a sensor body (10) can be moved axially in a housing (11) intended to be mounted in the stator and is connected to an operating mechanism (13) for axial movement of the sensor body relative to the housing, characterized in that the sensor body (10) as a stop (16) at a predetermined distance (e) from the end surface of its measuring end (10a), which distance (e) is considerably smaller than the length of the sensor body (10), which stop (16) is designed to interact with a corresponding stop (17) inside the housing (11), and in that this distance (e) exceeds the distance (d) between the stop (17) in the housing and the end surface of the measuring end (10a) of the sensor body by a predetermined distance (c) when the sensor body is in its normal measuring position in the stator.
4. (original) A sensor device according to Claim 3, characterized in that the stop (16) in the sensor body is provided with teeth (18), the tips of which point towards the stop (17) in the housing.
5. (currently amended) A sensor device according to Claim 3 [or 4] characterized in that the stop (17) in the housing is essentially in the shape of a ring and is arranged at the end of the housing (11).
6. (currently amended) A sensor device according to [any one of] Claim[s] 3[-5], characterized in that the distance

(c) between the two stops (16, 17) is at least the same size as the grinding gap (6) between a rotor and the stator when the sensor body (10) is in its normal measuring position.

7. (new) A sensor device according to Claim 4 characterized in that the stop (17) in the housing is essentially in the shape of a ring and is arranged at the end of the housing (11).

8. (new) A sensor device according to Claim 4 characterized in that the distance (c) between the two stops (16, 17) is at least the same size as the grinding gap (6) between the a and the stator when the sensor body (10) is in its normal measuring position.

9. (new) A sensor device according to claim 5 characterized in that the distance (c) between the two stops (16, 17) is at least the same size as the grinding gap (6) between a rotor and the stator when the sensor body (10) is in its normal measuring position.